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Department of Commerce and Labor  
COAST AND GEODETIC SURVEY

O. H. Tittmann  
Superintendent.

State: Maine

DESCRIPTIVE REPORT.

Hyd. Sheet No. 3025

LOCALITY:

Two Bush Channel  
and Approaches to  
West Penobscot Bay

1909

CHIEF OF PARTY:

N. H. Heck

3025

3025

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Department of Commerce and Labor  
COAST AND GEODETIC SURVEY

*O. H. Tittmann*  
Superintendent.

State: *Maine*

DESCRIPTIVE REPORT.

*Hydrographic Sheet No. 3025*

LOCALITY:

*Coast of Maine*  
*Two Bush Channel*  
*between Seavey's Ledge*  
*and Longitude 68° 54'*

1900

CHIEF OF PARTY:

*N. H. Heck*

3025

HYDROGRAPHIC SHEET No. 3025

COAST OF MAINE

Two Bush Channel

Between Seavey's Ledge and Longitude 68° 54' West.

Area examined by Wire Drag Party.

Chief of Party-N. H. Heck, Assistant.

Drag 1, Launches, Francis Eaton and Helen Margaret; Geo. Olsen, W.O., in charge.

Drag 2 Launches, Katherine and Sokokis; J.H. Hawley, Aid, in charge.

From June 25 to Sept. 13, 1910.

Scale, 1/20000

Officers in addition to those named above.

P. S. Donnell, Aid.

J. A. Smith, Deck Officer.

D. M. Kyle, " "

L. M. Fisher, " "

E. E. Reese, " "

Tendermen

E. Lamb

M. C. Bird

Recorders

W. C. Bird

W. W. Whiting

ALASKA BUREAU OF GEODESY  
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## TWO BUSH CHANNEL, MAINE

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The work of dragging this channel was begun. Owing to the great abundance of lobster pots some area was missed, but they can be covered in a short time. The dangerous shoals found have been reported in the Weekly Notice to Mariners.

There is a large amount of navigation in this channel, as it is used by all large vessels trading between Boston and points on Penobscot Bay and river. Vessels of drafts up to 26 feet use this channel every day.

According to statements of lobstermen the western approaches of this channel contain many uncharted shoals which are dangers to vessels of considerable draft.

# 3025

Descriptive Report  
to Accompany Sheet 3025.

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The dragging on this sheet was done principally with the intention of finding which part of Two Bush Channel is safest for the navigation of vessels of deepest draft but also to develop that area in the southern part where the charted soundings and reports from fishermen indicated less depth than charted. An effective depth of at least 36ft. m.l.w. was carried over this entire area except where less depth was charted or found, and here the usual practice of dragging within two feet of charted depth or of depth charted found by sounding was carried out as far as practicable. The central portion of the channel and the northern part lying between Crow Id. Ledges and Seabeys Ledges was found to be free from obstructions of depth less than the effective depth of the drag. On the southern side of the channel an almost continuous ridge of varying widths was found between the northern end of Metinic Id. and the shoal ground lying 1/2 mi. north of the Northern Triangles buoy C 1. An examination was also made of Green Pt. shoal east of Metinic Island. This was found to be more extensive than formerly charted.

The shoals are given in detail as follows. The rocky ridge extending north from Metinic Id. was found to extend further north than was charted, at depths of 30-35 ft. 1700 m. N E x N from prominent house on the north end of the island. Bearings will be given from the same house for the shoals following. On the charted 5 3/4 fath. shoal lying 3600 m. N 1/2 W no less depth was found than charted. Shoal depths were found over an extensive area, 2100 by 1300 meters, lying about 1 mi.

to the westward from Aldens Rock. A shoal of 600 x 450 m. with depths from 28 - 37 ft. lies about 3900 m. N E from Metinic Id. house. A small pinnacle of 36 ft. lies 5500 m. NE from same. A shoal with 27 - 31 ft., 160 x 50 m. direction N - S, lies 4480 m. NE 1/2 E. A pinnacle with 32 ft, lies 4120 m. NE x E from same house. A shoal with depths of 25 - 30 ft. , 160 x 30 m. NW\*SE, is 3960 m. NE x E 1/2 E from same. 14 ft. was found where the chart shows 3 1/4 fath. 5660 m. NE x E 1/2 E No shoals were found between this and Aldens Rock. A shoal 24 - 34 ft., 200 x 30 m. NW-SE, was found 3780 m. S 1/2 W from Two Bush Lt. A rocky ridge with 32-34 ft., 550 x 30 m. in extent, lies 3680 m. S xE from Two Bush Lt. On the 5 3/4 fath. shoal, lying 2300 m. S x E from Two Bush Lt., no less depth was found than charted. The same depth as charted was found on the shoal lying 3440 m. SSE 1/2 E from Two Bush Lt. Another 39 ft. pinnacle was found 3560 m. SE x S from the same light. A depth less than 6 fath. over an <sup>extensive</sup> entire area to the north'rd of Northern Triangles bouy C 1 was found. A depth of 15 1/2 ft. was found at nearly the same place as where 17 ft. was reported last year. The ridge extends NE-SW with 30 ft. 440 m. and 29 ft. 200 m. SE from the 15 ft. spot and 35ft. 100 m. and 34 ft. 250 m. NW from this spot. A depth of 40 ft. was found 4720 m. SE 1/2 E from Two Bush Lt.

Depths from 21-28 ft. were found over an extensive area in the vicinity of Green Point shoal. The investigation was by no means exhaustive and the shoal probably extends over a much larger area. Shoals are reported to exist to the south'rd of Southern Triangles where no less than 19 fath. is charted.

On the northern side a shoal with 39 ft. was found 960 m. SW 1/2 W

from Whitehead Id. Lt. A  $5\frac{3}{4}$  fath. shoal charted between Stallion Ledge and Southern Breakers was dragged over and no less depth than charted was found.

All these shoals have been dragged over and the area included in this years work has all been covered. On the entire sheet only a few small areas missed last year remain undragged. A strip about 2 mi. wide, lying south of a line joining T.B.I. whistle and Bay Ledge and adjoining work on sheet 2969, with very uneven bottom was dragged over without finding any shoals.

It may now be stated that if vessels of the deepest draft keep in the channel they may enter Penobscot Bay in safety. The work done between Metinic Id. and Southern Triangles indicates that no absolutely safe channel for entering the bay exists between Metinic Id and Pigeon Ground, and leaves all the channels between Metinic Id. and Seal Id. some what in doubt, as indications of dangers are numerous on the chart.

A new form of buoy was used and the drag depths as entered are a result of tests. They have been entered and checked and need not be rechecked in the office.

For the method used in plotting depths see report for sheet 13.

COAST OF MAINE

TWO BUSH CHANNEL

HYD. SHEET LL 3025

WIRE DRAG PARTY

N. H. Hock, Assistant, Chief of Party  
Clem L. Garner, Aid, Operating Drag 2  
Geo. Olsen, Watch Officer, Operating Drag 1

Scale 1/30000

Oct. 6 to Oct. 20, 1909.

OFFICERS IN ADDITION TO THOSE NAMED ABOVE.

Jean H. Hawley, Aid.  
L. W. Smith, Jr. Aid.,  
C. Y. Harger, Aid.  
T. L. Warner, Deck Officer.  
R. P. Strough, " "  
L. F. Walsh, " "  
M. E. McChristie, " "

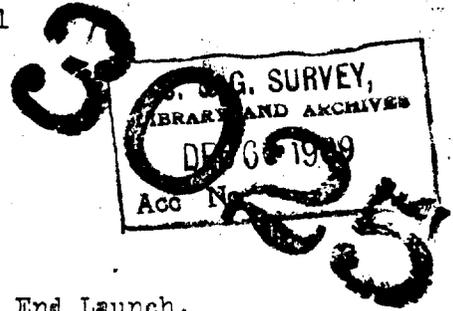
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WIRE DRAG PARTY

TWO DUSH CHANNEL; MAINE.



Drag 1 -- FRANCIS EATON; Guiding Launch: ADELAIDE, End Launch.

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Date 1909	Letter	Vol.	Angles	Miles	Sdgs.	Length Drag.
Oct. 6	a	1	102	4.25	1	6000 and 2000 ft.
9	b	1	180	4.00	2	1500 ft.
10	c	1	198	4.25	1	1000 ft.
20	d	1	174	3.25	3	2000 ft.

			654	15.8	7	
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Oct. 6	Drag 2	4 launch drag	96			
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750

Total	Angles	750
	Miles	15.8
	Sdgs.	7
	Area	4 1/2 sq. miles

Tide Gauge.

Dix Island, Me.

M.L.W. on T.G. = 3.0 ft.

( oir other data see records at office. )

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STATISTICS

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Sheet No. 3025

1910 Date	Let- ter	Drag 1			Drag 2			Soundings	
		Angles	Miles	Length of drag	Angles	Miles	Length of drag	No.	Ang- les
June 25	a				246	8.00	2000	2	4
28	b				24	0.50	1750	2	4
29	c				228	6.00	2000	1	2
30	d				144	2.50	2000	2	6
July 1	e				210	4.50	1200	1	2
2	f				162	2.50	1200	1	2
5	g				126	2.50	1200	1	2
6	h				324	6.50	1050	2	4
11	j	72	4.00	4000	79	4.00	4000	2	4
12	k	240	4.50	1200	150	3.50	2000	2	4
14	l	165	5.30	4000 2000	68	2.00	4000	0	0
15	m	258	7.50	1200	115	3.00	2000	4	9
16	n	270	5.25	1200	246	5.25	1200 2000	2	4
18	o	76	1.25	1200	443	8.00	2000	0	0
20	p	138	2.75	1350				0	0
Aug. 3	q	198	2.00	8400	180	3.00	8400	0	0
5	r	68	2.00	8400	57	2.00	8400	0	0
8	s	396	7.00	2000	410	7.00	1000	1	2
10	t	30	.75	2800	244	5.25	1000	2	4
12	u				282	4.00	800 1000	2	4
13	v	216	4.00	1500	384	5.75	1000	5	10
15	w	96	1.75	900					
17	x	141	5.00	2800	59	2.75	8400	1	2
18	y	270	6.50	8400					
20	z	100	6.75	8400					
Sept. 13	a'			5600	107	7.00	8400	0	0
					162	3.25	2000	1	2
Totals		2734	66.30		4450	98.75		34	74

Final totals; Angles-7255; Miles-165.05; Square miles-31; Soundings-34.

## TIDES

For the work on this sheet the tides were observed at two points. For the work done west of Longitude  $68^{\circ} 01' 30''$ , the tides were observed at Tennant's Harbor. The staff was on Rawley's wharf in open water about one mile from the entrance of the harbor. For the work done east of this meridian the tides were observed at Vinalhaven, Me. The staff was on Johnson & Young's wharf, in open water about  $\frac{3}{4}$  of a mile from the entrance of the harbor.

## Tide Staff at Tennant's Harbor, Me.

Plane of reference . . . . . 2.0 ft.

Lowest tide observed . . . . . 1.4 ft

Highest tide observed . . . . 12.0 ft.

## Tide Staff at Vinalhaven, Me.

Plane of reference . . . . . 2.0 ft.

Lowest tide observed . . . . . 1.1 ft.

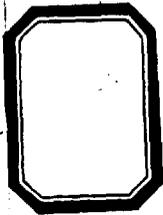
Highest tide observed . . . . 13.0 ft.

U.S. Sheet No. 3825

Nov 5, 1910.

The work on this sheet has been  
verified and found correct.

H. L. Sumner



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SEP 16 1913  
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Department of Commerce and Labor  
COAST AND GEODETIC SURVEY

O. H. Tittmann  
Superintendent.

State: Maine

DESCRIPTIVE REPORT.

Hyd ..... Sheet No. 3025 *Additional work (1913)*

LOCALITY:

Coast of Maine

S. Approach to Penobscot Bay

between Green I. and No Mans Land

1913

CHIEF OF PARTY:

N. H. Heck

11-4846

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The work done on this sheet in 1913 includes the area between a line joining Northern Triangles Ledge Buoy to Collins Rock and Green Island Seal Ledges W. B. and the meridian passing through Zephyr Rock Buoy. It joins on the north the area covered in 1910 north of parallel  $48^{\circ} 56'5$

The area was found to be free from shoals with less than 40 feet except in the vicinity of Green Island. An uncharted ledge was found east of the South End of Green Island with a least depth of 23 feet. A 34 ft round rock of small extent was found northeast of Green Island. The color scheme for indicating depths is shown on the sheet

HYDROGRAPHIC SHEET 3025

South Approaches to Penobscot Bay, Maine, by  
Assistant N. H. Heck in 1913.

TIDES.

	Matinicus Harbor
	ft.
Mean low water or plane of reference on staff	1.5
Lowest tide observed " "	0.0
Highest " " " "	11.5
Mean range of tide	9.1

United States Coast and Geodetic Survey

OCT 20 1913

CHAS. H. HENNING